

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 6.70.1064	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, Item 5 below.	
International application No. PCT/IB 03/05414	International filing date (day/month/year) 25/11/2003	(Earliest) Priority Date (day/month/year) 29/11/2002
Applicant INTERBREW S.A.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 6 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ Certain claims were found unsearchable (See Box I).

3. ☐ Unity of invention is lacking (see Box II).

4. With regard to the title,

☐ the text is approved as submitted by the applicant.

☒ the text has been established by this Authority to read as follows:

ALCOHOLIC BEVERAGE DISPENSING APPARATUS

5. With regard to the abstract,

☐ the text is approved as submitted by the applicant.

☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☒ because this figure better characterizes the invention.

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☐ None of the figures.

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Box III TEXT OF THE ABSTRACT (Continuation of item 5 of the first sheet)

A cooling system (23,34) for a home beer dispensing apparatus (10) has a mediated thermal bridge (40) providing a bank of latent cooling capacity. The bridge (40) may have a cavity filled with a cooling solution (66) with at least one series of spaced apart heat exchange fins (48,76,84) extending substantially along and interstitially into the cavity (62) so as to enhance heat transfer across the cavity (62). The bridge (40) is arranged in thermal conducting relation through a cooling plate (64) between a keg (22) and a Peltier thermoelectric cooling device (36) adapted to cool the cooling solution (66). The cooling solution (66) may comprise 5% by volume glycol and freezes at a temperature below that of water. The cooling plate (64) has an electrical resistance heater (45) mounted therein to maintain the temperature of beer (69) in the keg (22) adjacent a bottom portion (68) thereof above the freezing temperature of the beer (69). The invention also provides a beer keg (22) for such systems (23,34).

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A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 F25D31/00 F25B21/02 B67D1/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B67D F25D F25B B65D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 19, 5 June 2001 (2001-06-05) -& JP 2001 055296 A (ZOJIRUSHI CORP), 27 February 2001 (2001-02-27) abstract figures 1-3	1, 37-43, 45-49, 51
A		2-4, 6, 8-12, 14, 16-19, 44, 50
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *Z* document member of the same patent family

Date of the actual completion of the international search

21 May 2004

Date of mailing of the international search report

10. 06. 2004

Name and mailing address of the ISA

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CORREIA DOS REIS, I

INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB 03/05414

C.(Continuation) DOCUMENT CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2 283 818 A (REISER ALBERT L) 19 May 1942 (1942-05-19) the whole document	1,2,20, 29,37, 39,45
Y		68-71, 77,82-84
A		3-5,7, 10-13, 15,18, 19, 21-26, 30-34,38
X	GB 1 016 735 A (ERIC CRISP LEWIS) 12 January 1966 (1966-01-12) the whole document	66,67, 72-76, 78-81
Y		68-71, 77,82-84
A	WO 99/66273 A (HEYES KEITH JAMES ; HOLLAND JOSEPH EUGENE (GB); MOONEY WILLIAM ROBERT) 23 December 1999 (1999-12-23) page 3, line 1 -page 4, line 4	4,12
A	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 12, 3 January 2001 (2001-01-03) -& JP 2000 258019 A (ZOJIRUSHI CORP), 22 September 2000 (2000-09-22) abstract figures 1-3	58-61
X	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 09, 13 October 2000 (2000-10-13) -& JP 2000 171142 A (ZOJIRUSHI CORP; NIPPON LIGHT METAL CO LTD), 23 June 2000 (2000-06-23) abstract figures 1-3	37-43, 45-49
A		44,50,51
X	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 24, 11 May 2001 (2001-05-11) & JP 2001 180800 A (KAWADA TETSUYA; RYUSYO INDUSTRIAL CO LTD), 3 July 2001 (2001-07-03) abstract figures 1-13	1
A		2-4,12, 20,37,39

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International Application No

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C.(Continuation) DOCUMENT CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2 447 390 A (BRAND EARL E) 17 August 1948 (1948-08-17)	66,67, 69, 72-76, 78,81
A	the whole document	68,70, 71,77, 79,80, 82-84
X	US 3 895 734 A (THOMAS LINDSAY MAITLAND) 22 July 1975 (1975-07-22)	66,67, 72-81
A	the whole document	68-71, 77,82-84
A	EP 1 188 995 A (ANCEL THIERRY) 20 March 2002 (2002-03-20)	1,4,8,9, 11,12, 16,17,19
A	the whole document	
A	PATENT ABSTRACTS OF JAPAN vol. 2002, no. 04, 4 August 2002 (2002-08-04) -& JP 2001 343178 A (ZOJIRUSHI CORP), 14 December 2001 (2001-12-14) abstract figure 1	58, 60-62, 64,65
A	GB 1 006 999 A (SAMUEL WHITE & COMPANY LTD J) 6 October 1965 (1965-10-06) figures 1-4	
A	PATENT ABSTRACTS OF JAPAN vol. 017, no. 133 (M-1383), 19 March 1993 (1993-03-19) -& JP 04 311495 A (HITACHI PLANT ENG & CONSTR CO LTD; OTHERS: 01), 4 November 1992 (1992-11-04) abstract figures 1-4	
A	US 3 243 965 A (JEPSON ROBERT M) 5 April 1966 (1966-04-05) the whole document	

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-57

Cooling system and home beer dispensing apparatus using such a cooling system

2. Claims: 58-65

Cooling system and home beer dispensing apparatus using such a cooling system

3. Claims: 66-84

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Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IB 03/05414

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 2001055296	A	27-02-2001	NONE	
US 2283818	A	19-05-1942	NONE	
GB 1016735	A	12-01-1966	NONE	
WO 9966273	A	23-12-1999	GB 2338544 A AU 4378599 A EP 1086342 A1 WO 9966273 A1 US 6546737 B1	22-12-1999 05-01-2000 28-03-2001 23-12-1999 15-04-2003
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US 2447390	A	17-08-1948	NONE	
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EP 1188995	A	20-03-2002	EP 1188995 A1	20-03-2002
JP 2001343178	A	14-12-2001	NONE	
GB 1006999	A	06-10-1965	NONE	
JP 04311495 8	A		NONE	
US 3243965	A	05-04-1966	NONE	